



December 20, 2005

Ms. Nicole Damin  
Hazardous Materials Specialist  
Stanislaus County Department of Environmental Resources  
3800 Cornucopia Way, Suite C  
Modesto, California 95358

06043  
06.a4

**RE: Well Destruction Report  
ARCO Service Station No. 6043  
2101 Tully Road, Modesto, California**

Dear Ms. Damin:

URS Corporation Americas (URS), on behalf of Atlantic Richfield Company (ARCO - a BP affiliated company), has prepared this report to document well destruction activities conducted at ARCO Station No. 6043 located at 2101 Tully Road, Modesto, California (Figures 1 and 2). The destruction of site monitoring wells was requested by the Stanislaus County Department of Environmental Resources (SCDER) to obtain closure for the site.

### **Permitting**

Well destruction permits were obtained from the SCDER and the City of Modesto prior to conducting field activities on the site. (Attachment A)

### **Well Destruction Activities**

On October 5, 2005, monitoring well MW-3 was hand cleared for utilities to 5 feet below ground surface (bgs) by air-knife, back-filled with sand, and capped with cold-patch asphalt. Vapor extraction well locations V-1 and V-2 were cleared to refusal (approximately 1.5 feet bgs due to concrete encountered) by air-knife, back-filled with sand, and capped with cold-patch asphalt. Monitoring well MW-1 and vapor wells VW-1 and VW-2 were located too close to (or within) the underground storage tank (UST) pit to be drilled out; therefore, this location was not hand cleared by air-knife. Additionally, monitoring well locations MW-2 and MW-4 were not hand cleared because they were built with vaults that were approximately 31-inch in diameter with concrete floors, which could cause a safety hazard for the vac clearing crew. The SCDER was notified of the conditions found on site and alternatives to well destruction activities described in the Well Destruction Workplan (URS, 2005) were discussed.

On November 2, 2005, Woodward Drilling Company, Inc. of Rio Vista, California, conducted well destruction activities. The monitoring wells (MW-1, MW-2, MW-3, and MW-4) and vapor wells (V-1, V-2, VW-1, and VW-2) were pressure grouted with neat cement grout containing <5% bentonite powder. Pneumatic pressure was applied at the top of casing to ensure filter pack infiltration. Any horizontal piping associated with the former remediation system was broken to allow the neat-cement grout to fill the void. The vault boxes for well locations MW-1, MW-2, MW-4, VW-1, and VW-2 were filled to within 4-inches of the surface with neat cement grout containing <5% bentonite powder. The vault covers were put back in place to allow the grout to set. Monitoring well MW-3 was drilled out to 5 feet bgs using 10-inch outside-diameter (OD) hollow stem augers, back-filled with neat cement grout containing <5% bentonite powder to near surface, then completed with Cal-Trans Set-45 concrete that

URS Corporation  
Crown Corporate Center  
2870 Gateway Oaks Drive, Suite 150  
Sacramento, CA 95833  
Tel: 916.679.2000  
Fax: 916.679.2900

K:\Wprocess\J5 BP ARCO\06043\Well Destr\6043 Well Destruction Report.doc

Ms. Nicole Damin  
Stanislaus County Department of Environmental Resources  
December 20, 2005

Page 2

was tinted to match the surrounding surface. The vault boxes for V-1 and V-2 were removed, the casings cut down to approximately 1.5 feet bgs, then finished with fast-set concrete and tinted to match the surrounding surface.

On November 22, 2005, Woodward Drilling returned to finish the concrete surface completions for well locations MW-1, MW-2, MW-4, VW-1, and VW-2 using Cal-Trans Set-45 concrete.

### **Waste Disposal**

Drill cuttings, wastewater, and well vault box waste generated during well destruction activities were placed in labeled 55-gallon Department of Transportation (DOT)-approved steel drums and stored on site. A composite soil sample was collected from the soil cuttings and submitted to the Sequoia Analytical Laboratory in Morgan Hill, California, for analysis of gasoline range organics (GRO), benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tert-butyl ether (MtBE), tert-butyl alcohol (TBA), ethyl tert-butyl ether (EtBE), di-isopropyl ether (DIPE), tert-amyl methyl ether (TAME), 1,2-dichloroethane (1,2-DCA), 1,2-dibromoethane (EDB), and ethanol by EPA Method 8260B (preparation EPA Method 5030), and total lead by EPA Method 6010B. The laboratory analytical report is included in Attachment B.

Removal of the drill cuttings, wastewater, and well vaults in drums from the site was scheduled with Dillard Trucking, Inc. Upon receipt of disposal manifests from the waste hauler, a report addendum will be submitted documenting field activities.


If you have any questions or comments regarding this letter report, please call Ms. Margaret Hogaboom at (916) 679-2241.

Sincerely,

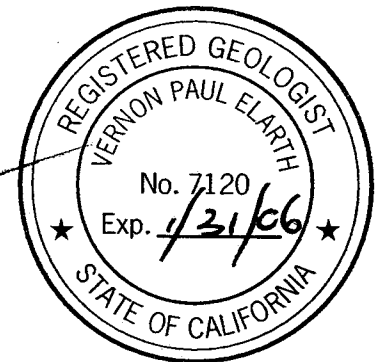
URS Corporation Americas



Margaret Hogaboom  
Staff Geologist



Vernon Elarth, R.G.  
Project Manager



Attachments: Figure 1 Site Location Map  
Figure 2 Site Map

Attachment A SCDER and City of Modesto Well Destruction Permits  
Attachment B Drum Comp Laboratory Analytical Report

cc: Mr. Paul Supple, Atlantic Richfield Company  
Mr. Mike Smith, RWQCB  
Ms. Wendy Correia, City of Modesto  
Project File

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## FIGURES

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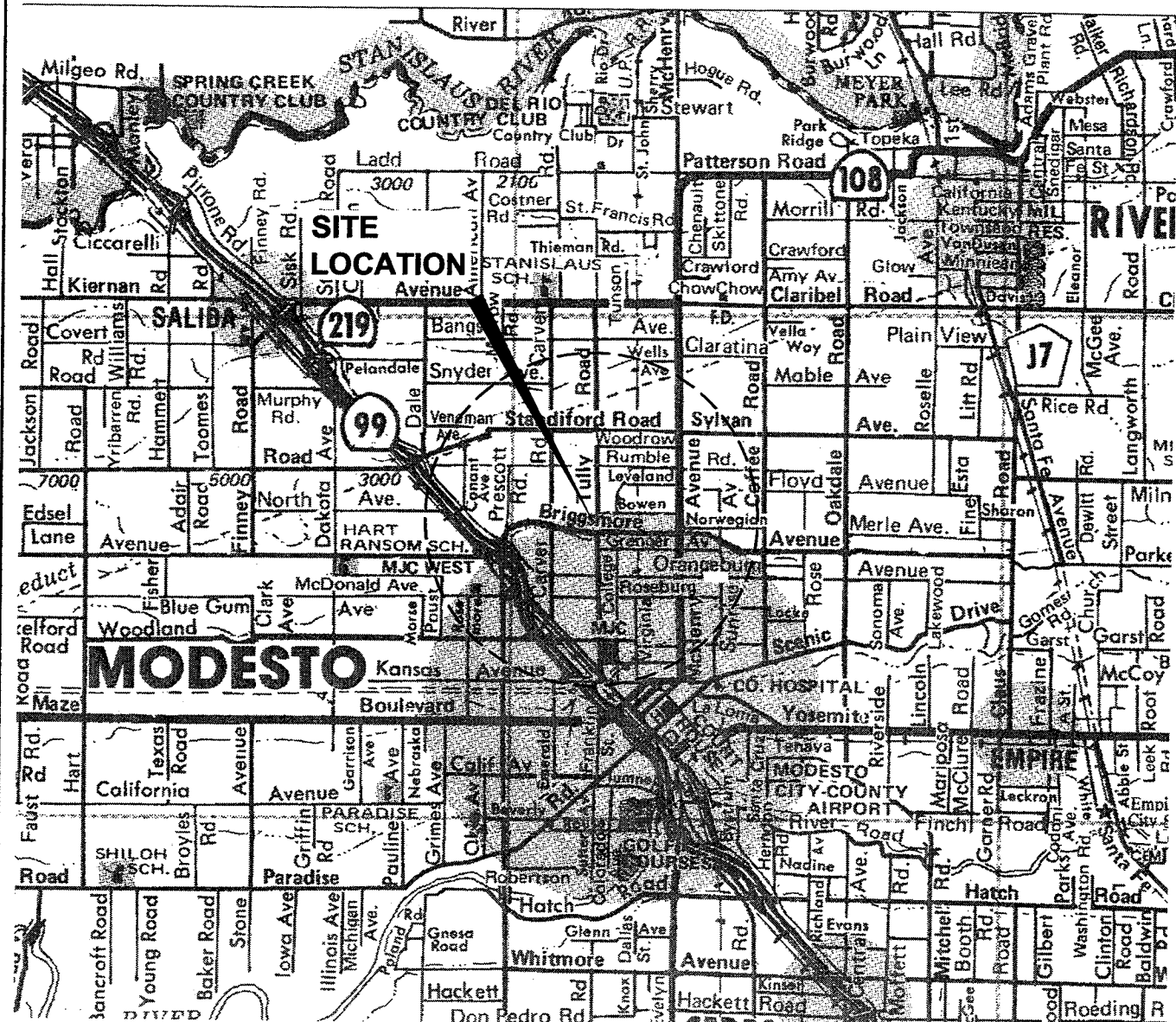
PLOT BY: RPTAYLOR - Dec 08, 2005 - 10:51:38am

IMAGES: 2101 Tully Rd.tif

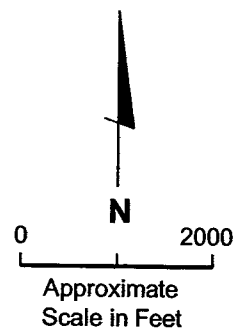
XREFS:

DRAWING: 6043\_SLM.dwg

DRAWING: J:\BP-ARCO\CADD\IO-Non-Qtrly-ARCO Sites\6043\



QUADRANGLE LOCATION



Approximate Scale in Feet



2870 Gateway Oaks Drive, Ste. 150  
Sacramento, CA 95833-3200  
TEL: (916) 679-2000  
FAX: (916) 679-2900

## SITE LOCATION MAP

ARCO Service Station No. 6043  
2101 Tully Road  
Modesto, California

FIGURE

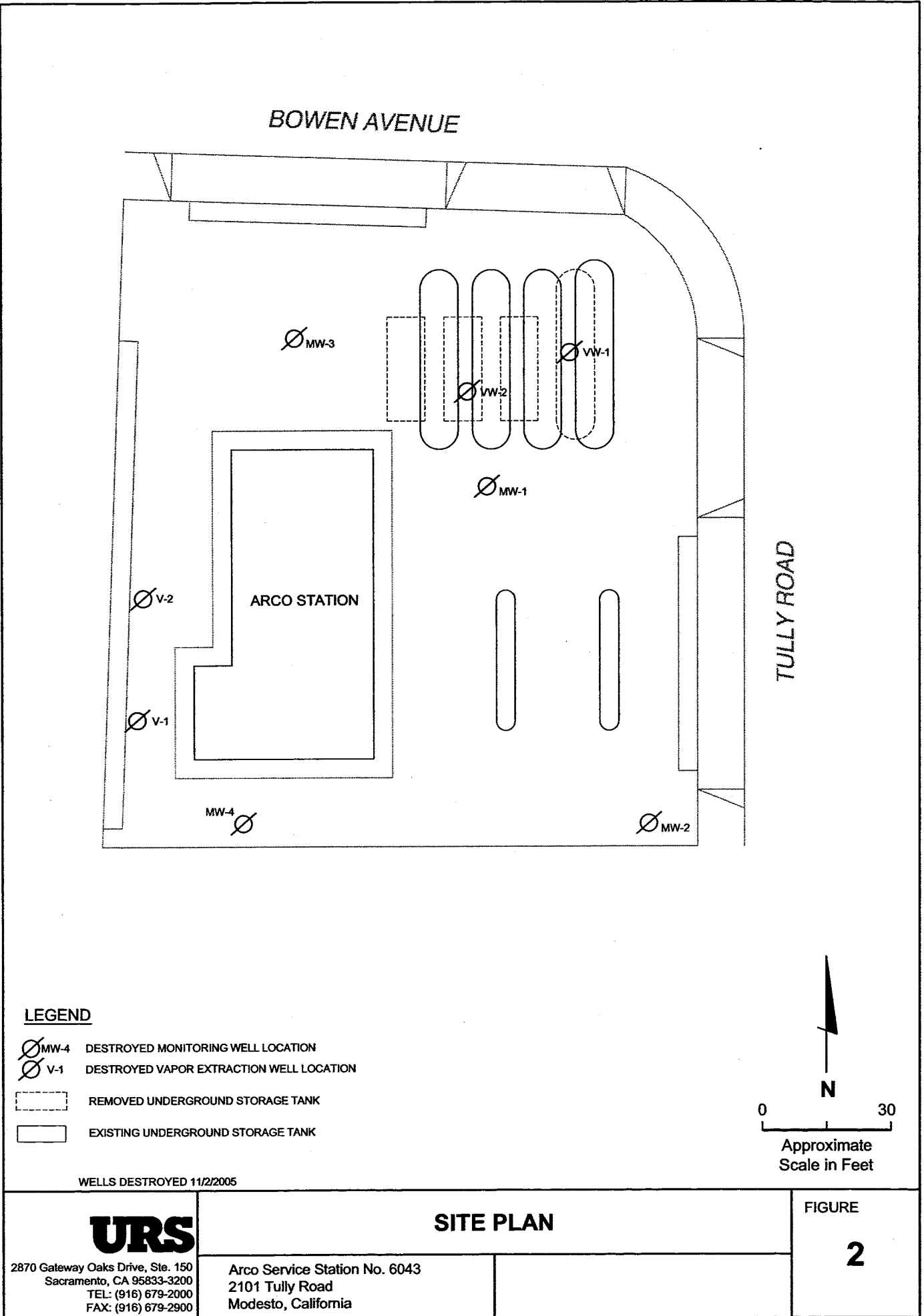
1

PLOT BY: RPTAYLOR - Dec 08, 2005 - 12:14:01pm

IMAGES:

XREFS:

DRAWING: MARGARET\_5043\_12805\_F2\_SITEPLAN.dwg  
DRAWING: J:\BP-ARCO\CADD\10-Non-Quality-ARCO Sites\6043\Reports-Special



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**ATTACHMENT A**

**SCDER and City of Modesto Well Destruction  
Permits**

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DEPARTMENT OF ENVIRONMENTAL RESOURCES

3800 Comucopia Way, Suite C, Modesto, CA 95358-9492  
Phone: 209.525.6700 Fax: 209.525.6774

September 21, 2005

Mr. Paul Supple  
ARCO Products Company  
Moraga, CA 94570

**RE: WELL DESTRUCTION WORK PLANS VARIOUS ARCO SITES, STANISLAUS COUNTY.**

Dear Mr. Supple:

I have reviewed the **Well Destruction Work Plans** for the following ARCO sites located within Stanislaus County:

1. ARCO No. 6043, 2101 Tully Road, Modesto.
2. ARCO No. 5505, 2033 Standiford Avenue, Modesto.
3. ARCO No. 5421, 2507 9<sup>th</sup> Street, Ceres.

The **Work Plans** propose to destroy all existing groundwater monitoring wells at the sites listed above. Each of these sites was closed with concurrence from the Regional Water Quality Control Board. In accordance with policy, SCDER has withheld issuance of the Remedial Action Completion Certification (RACC) for each of the sites due to the fact that ARCO elected to retain the monitoring wells. Upon receipt of notification of proper well destruction, the Department will proceed to issue the RACC for each site. The work plans are approved at this time.

I am including a **Notice of Proposed Action** for each of the sites. Please fill out the fee title owner for each property and return them to my office. Please be aware that the RACC notification cannot be issued without receipt of the notices. If you have any questions please feel free to contact me at (209) 525-6725, or by email at [ndamin@envres.org](mailto:ndamin@envres.org).

Sincerely,

Nicole Damin  
Senior Hazardous Materials Specialist

cc: File 2101 Tully Road  
File 2033 Standiford Ave  
File 2507 9<sup>th</sup> Street  
RWQCB Newman/Smith  
URS Corporation - Mr. Vern Elarth ✓

PERMIT NO. W 4362

# CITY OF MODESTO

Public Works  
1010 Tenth Street  
P.O. Box 642  
Modesto, CA 95353



Valid From: 10/3/2005 To: 10/3/2005

RECEIPT# 100 03-0182415  
ENCROACHMENT INSPECTION FEE  
030-420-4212-2210

Development Services, Suite 4100  
Permits Tel. No. (209) 571-5569  
Permits Fax: (209) 577-5461  
Inspection: (209) 577-5452

Applicant/Owner: URS

Attn: Margaret Hogaboom  
Street Address: 2870 Gateway Oaks Dr. #300  
City, State, & Zip Code: Sacramento, CA 95833

Contractor: Woodward Drilling

Attn:  
Street Address: P O Box 336  
City, State, & Zip Code: Rio Vista, CA 94571

phone: 916-679-2261

fax: 916-679-2900

email:

phone:

cell:

fax:

email:

## 2101 Tully Road

### Description

Monitoring Well/Emergency Extraction Well  
or other excavation that may intersect groundwater  
Application Fee 1 ea \$ 42.00 \$ 42.00 3010  
Inspection Fee 8 ea \$ 96.00 \$ 768.00 3015

### SEE ADDITIONAL REQUIREMENTS ATTACHED

Copies of all reports generated as a result of this Well/Boring will be submitted to the City of Modesto, Water Division, Pumps & Maint. Supervisor

Plans Attached*				Y	N
Description	Qty	Unit	Unit Cost	Total	Tran Code
Monitoring Well/Emergency Extraction Well			\$ -	\$ -	
or other excavation that may intersect groundwater			\$ -	\$ -	
Application Fee	1	ea	\$ 42.00	\$ 42.00	3010
Inspection Fee	8	ea	\$ 96.00	\$ 768.00	3015
			\$ -	\$ -	
			\$ -	\$ -	
TOTAL				\$ 810.00	

### ADMINISTRATIVE CHECKS

Over 1 acre (NOI required)  
Point Discharge Systems  
Workers' Compensation dss  
General Liability dss  
Engineering plans

### SAFETY

Traffic Controls  
Detour Plan  
Police Notification  
Fire Notification  
Public Release

### FEES/REIMBURSEMENTS

CFF Fee  
CFD Fee  
CFF Reimbursement  
CFD Reimbursement  
Trench Cut Ordinance

Canal District Fee  
Storm District Fee  
Sewer Reimbursement  
Water Reimbursement

PERMIT ISSUED BY: W. Correia

ASSIGNED INSPECTOR: Robert Snell

INSPECTOR'S ACCEPTANCE:

DATE: 10/3/2005

DATE:

Permit Distribution:

Applicant

CAO

Streets

File (original)

Police

Other

## STANDARD ENCROACHMENT PERMIT CONDITIONS

The following conditions are for the City standard encroachment permit:

- 1 Call the inspector 48 hours BEFORE starting work AND for final inspection – 577-5452.
  - 2 Perform work according to City of Modesto Standard Specifications and MMC Sec. 7-2.01 et seq and Sec 7-1.105 et seq.
  - 3 Call USA at 800-642-2444 and 800-227-2600 and MID at 209-526-7373 for utility locations at least 48 hours before digging. Other companies include, but are not limited to: PG&E, SBC, and Comcast.
  - 4 Provide a copy of these permit conditions to ALL contractors doing work covered under this permit.
  - 5 Construct subdivision improvements in accordance with approved plan set. Inspection fees to be reimbursed in accordance with Subdivision Agreement and/or Modesto Municipal Code (MMC).
  - 6 Prior to receiving any water taps, the developer shall pay the water service connection charges.
  - 7 Prior to issuance of the permit for a project over 1 acre, the contractor or developer shall provide the Developer/Contractor Information and a copy of the Notice of Intent (NOI) filed with the Water Resources Board. In compliance with the Water Resources Board, the Stormwater Pollution Prevention Plan is required to be onsite. A copy of the NOI shall be attached to this permit.
  - 8 A copy of the City of Modesto Erosion and Sediment Control and Standard Specifications for Construction Activities is available at Kinko's or on the City of Modesto's Website ([www.ci.modesto.ca.us](http://www.ci.modesto.ca.us)).
  - 9 For projects with no existing concrete or asphalt, an aggregate pad shall be constructed at each ingress and egress point to the street pavement.
  - 10 Off-site inlets adjacent to your project shall have filter screens placed in the grates to prevent silt contamination. These shall be maintained during the entire duration of the project.
  - 11 All CFD, CFF and reimbursable utility line construction work shall be permitted by a separate agreement. No work shall be done on these items until a reimbursement agreement is executed and a permit is issued specifically for the items.
  - 12 No landscaping work is permitted unless plans are approved by the Parks, Recreation and Neighborhoods Department.
- Street and Alley Closures / Traffic Control**
- 13 Call Fire and Police at 572-9679 BEFORE closing any part of the street or alley.
  - 14 Open all traffic lanes during peak hours: Mon-Fri: 7:30 – 8:30 AM; 4:30 – 5:30 PM.
  - 15 Full street closures will require a separate permit. Street closure permits will be conditioned to post all streets converging to this location with public warning signs of the pending closure. The traffic plan shall be approved a minimum of 2 weeks prior to pending closure. The traffic plan will address the detour of traffic. The permit will minimize the amount of time the closure is in effect.
  - 16 Partial street closures may be coordinated with the inspector. Partial street closures may be limited in time to 8:30 am to 4:30 pm. All construction traffic control shall follow the Caltrans manual.

### ADDITIONAL CONDITIONS:

APPLICANT'S SIGNATURE: See Attached Application DATE: \_\_\_\_\_

**ADDITIONAL PERMIT REQUIREMENTS**  
**Permit #W**

- 1 Driller is responsible for protecting all City utilities impacted by this scope of work.
- 2 A copy of all reports generated by the installation of these wells or borings **must** be sent to:

**City of Modesto, Water Division**  
**Pumps and System Maintenance Supervisor**  
**P. O. Box 642**  
**Modesto, CA 95353**

**AND**

**Stanislaus County - DER**  
**Nicole Damln**  
**3800 Cornucopia Way, Suite C**  
**Modesto, CA 95358**

- 3 Contractor is responsible for contacting USA to have ALL utilities marked prior to starting any work related to this permit.

**APPLICATION TO INSTALL MONITORING WELL(S), EMERGENCY  
EXTRACTION WELL(S), OR ANY OTHER EXCAVATION(S) THAT MAY  
INTERSECT GROUNDWATER WITHIN THE CITY OF MODESTO.**

1. Location of Well Site: 2101 Tully Road No. of Wells: 4 VEW  
2. Applicant-Company: BP-ARCO  
Mailing Address: 6 Centurypointe Dr., La Palma, CA 90623  
Telephone No: Call URS Authorized Agent: URS  
3. Consulting Firm: URS  
Mailing Address: 2870 Gateway Oaks Dr. #300, Sacramento, CA  
Telephone No: 216 679 2261 Point of Contact: Mike Hull  
4. Contractor/Driller: Woodward Drilling  
C57 License Number: 581639

The undersigned requests that the City of Modesto grant permission pursuant to Sections 5-1.501 and 5-1.505 of the Modesto Municipal Code to install, construct, repair, modify, or destroy a water well, observation well, monitoring well, or any other excavation that may intersect groundwater in the City for any purpose whatsoever.

The undersigned agrees to the following provisions:

5. The installation of the wells shall be subject to the supervision of the Engineering and Transportation Director of the City of Modesto and the Environmental Resources Department of the County of Stanislaus.
6. The installation shall be made in accordance with all requirements of the laws of the State of California, County of Stanislaus, and the City of Modesto. Installation shall meet all requirements set forth in the latest revision of the State Department of Water Resources Bulletin 74-81, Water Well Standards: State of California and supplement No. 74-90, California Well Standards: Water Wells, Monitoring Wells, Cathodic Protection Wells.
7. When the wells are no longer required, the undersigned shall abandon and permanently seal them in accordance with the requirements of Engineering and Transportation Director. The undersigned agrees at its sole cost and expense, in accordance with applicable laws, to permanently and effectively abandon any well(s) that it has installed thereon according to the latest revision of the State Department of Water Resources Bulletin 74-81 and 74-90. Said abandonment shall be done to the reasonable satisfaction of the City of Modesto's Engineering and Transportation Director, or his authorized representative.

8. In the event that the undersigned fails to vacate and abandon the well(s) when no longer required, then the City of Modesto, or its authorized agents, may enter upon the premises and abandon the well(s) in accordance with paragraph 3. In such case, the undersigned agrees to reimburse the City of Modesto for any and all reasonable expenses it may so incur and waive any and all claims for damages against the City of Modesto, its agents or employees.
9. All construction, repair, modification, destruction, or abandonment of permitted wells shall be subject to the supervision of the CITY and the Environmental Resources Department of Stanislaus County.
10. The undersigned agrees that the permission granted hereby will be binding on all of its successor's, assigns and heirs.

Stanislaus County Department of Environmental Resources signifies by the signature below that it has received and reviewed the initial work plan proposal.

  
 \_\_\_\_\_  
 Stanislaus County Department of Environmental  
 Resources Division of Hazardous Materials

Please Note: Actual construction, repair, modification, destruction, or abandonment cannot begin until the Stanislaus County Department of Environmental Resources has reviewed and approved the initial work plan. Any well information generated, as a result of this effort, shall be released to the CITY and the Department of Environmental Resources.

I/We agree to the above:

URS  
 \_\_\_\_\_  
 Name of Company

  
 \_\_\_\_\_  
 Signature of Authorized Agent

Geologist  
 \_\_\_\_\_  
 Title of Authorized Agent

8/20/05  
 \_\_\_\_\_  
 Date

Permission to install monitoring test well(s) and/or Emergency extraction well(s) on the above referred to Property located in the City of Modesto, in accordance with The provisions of Section 5, Article 5, Construction, Operations, and Maintenance of Wells and subject to the above conditions. In addition, actual installation/abandonment cannot begin until the County Department of Environmental Resources has also approved the project.

  
 \_\_\_\_\_  
 PUBLIC WORKS DIRECTOR

9/30/05  
 \_\_\_\_\_  
 Date

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**ATTACHMENT B**

**Drum Comp Laboratory Analytical Report**



8 November, 2005

Vernon P. Elarth  
URS Corporation [Arco1]  
2870 Gateway Oaks Dr., Ste 300  
Sacramento, CA 95833

RE: ARCO #6043, Modesto, CA  
Work Order: MOK0106

Enclosed are the results of analyses for samples received by the laboratory on 11/03/05 08:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race  
Senior Project Manager

CA ELAP Certificate #1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.

URS Corporation [Arco1]  
2870 Gateway Oaks Dr., Ste 300  
Sacramento CA, 95833Project: ARCO #6043, Modesto, CA  
Project Number: G0C1X-0002  
Project Manager: Vernon P. ElarthMOK0106  
Reported:  
11/08/05 08:27**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DRUMCOMP6043	MOK0106-01	Soil	11/02/05 16:30	11/03/05 08:30
TBARCO6043-110205	MOK0106-02	Water	11/02/05 16:45	11/03/05 08:30

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies.

These samples were received with intact custody seals.



URS Corporation [Arco1]  
2870 Gateway Oaks Dr., Ste 300  
Sacramento CA, 95833

Project: ARCO #6043, Modesto, CA  
Project Number: G0C1X-0002  
Project Manager: Vernon P. Elarth

MOK0106  
Reported:  
11/08/05 08:27

**Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B**

**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>DRUMCOMP6043 (MOK0106-01) Soil    Sampled: 11/02/05 16:30    Received: 11/03/05 08:30</b>									
Gasoline Range Organics (C4-C12)	ND	0.10	mg/kg	1	5K04001	11/04/05	11/04/05	EPA 8015B/8021B	
Benzene	ND	0.0010	"	"	"	"	"	"	
Toluene	ND	0.0010	"	"	"	"	"	"	
Ethylbenzene	ND	0.0010	"	"	"	"	"	"	
Xylenes (total)	ND	0.0010	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		109 %	64-145		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89 %	56-120		"	"	"	"	



URS Corporation [Arco1]  
2870 Gateway Oaks Dr., Ste 300  
Sacramento CA, 95833

Project: ARCO #6043, Modesto, CA  
Project Number: G0C1X-0002  
Project Manager: Vernon P. Elarth

MOK0106  
Reported:  
11/08/05 08:27

**Total Metals by EPA 6000/7000 Series Methods**

**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**DRUMCOMP6043 (MOK0106-01) Soil**    **Sampled: 11/02/05 16:30**    **Received: 11/03/05 08:30**

Lead	ND	5.0	mg/kg	1	SK07023	11/07/05	11/07/05	EPA 6010B	
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URS Corporation [Arco1]  
2870 Gateway Oaks Dr., Ste 300  
Sacramento CA, 95833

Project: ARCO #6043, Modesto, CA  
Project Number: G0C1X-0002  
Project Manager: Vernon P. Elarth

MOK0106  
Reported:  
11/08/05 08:27

**Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5K04001 - EPA 5035 heated prg / EPA 8015B/8021B**

**Blank (5K04001-BLK1)**

Prepared & Analyzed: 11/04/05

Gasoline Range Organics (C4-C12)	ND	0.10	mg/kg							
Benzene	ND	0.0010	"							
Toluene	ND	0.0010	"							
Ethylbenzene	ND	0.0010	"							
Xylenes (total)	ND	0.0010	"							
Surrogate: a,a,a-Trifluorotoluene	0.0423		"	0.0400		106	64-145			
Surrogate: 4-Bromofluorobenzene	0.0383		"	0.0400		96	56-120			

**Laboratory Control Sample (5K04001-BS1)**

Prepared & Analyzed: 11/04/05

Gasoline Range Organics (C4-C12)	0.257	0.10	mg/kg	0.275		93	55-140			
Benzene	0.00417	0.0010	"	0.00410		102	75-150			
Toluene	0.0229	0.0010	"	0.0207		111	65-120			
Ethylbenzene	0.00451	0.0010	"	0.00485		93	65-125			
Xylenes (total)	0.0272	0.0010	"	0.0238		114	65-125			
Surrogate: a,a,a-Trifluorotoluene	0.0445		"	0.0400		111	64-145			
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400		101	56-120			

**Matrix Spike (5K04001-MS1)**

Source: MOK0106-01

Prepared & Analyzed: 11/04/05

Gasoline Range Organics (C4-C12)	0.119	0.10	mg/kg	0.275	ND	43	55-140			LN
Benzene	0.00335	0.0010	"	0.00410	ND	82	75-150			
Toluene	0.0181	0.0010	"	0.0207	ND	87	65-120			
Ethylbenzene	0.00320	0.0010	"	0.00485	ND	66	65-125			
Xylenes (total)	0.0194	0.0010	"	0.0238	ND	82	65-120			
Surrogate: a,a,a-Trifluorotoluene	0.0419		"	0.0400		105	64-145			
Surrogate: 4-Bromofluorobenzene	0.0275		"	0.0400		69	56-120			

**Matrix Spike Dup (5K04001-MSD1)**

Source: MOK0106-01

Prepared & Analyzed: 11/04/05

Gasoline Range Organics (C4-C12)	0.172	0.10	mg/kg	0.275	ND	63	55-140	36	20	BA
Benzene	0.00361	0.0010	"	0.00410	ND	88	75-150	7	20	
Toluene	0.0196	0.0010	"	0.0207	ND	95	65-120	8	20	
Ethylbenzene	0.00366	0.0010	"	0.00485	ND	75	65-125	13	20	
Xylenes (total)	0.0215	0.0010	"	0.0238	ND	90	65-120	10	20	
Surrogate: a,a,a-Trifluorotoluene	0.0416		"	0.0400		104	64-145			
Surrogate: 4-Bromofluorobenzene	0.0369		"	0.0400		92	56-120			

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.



URS Corporation [Arco1]  
2870 Gateway Oaks Dr., Ste 300  
Sacramento CA, 95833

Project: ARCO #6043, Modesto, CA  
Project Number: G0C1X-0002  
Project Manager: Vernon P. Elarth

MOK0106  
Reported:  
11/08/05 08:27

**Total Metals by EPA 6000/7000 Series Methods - Quality Control  
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5K07023 - EPA 3050B / EPA 6010B**

**Blank (5K07023-BLK1)**

Prepared & Analyzed: 11/07/05

Lead ND 5.0 mg/kg

**Laboratory Control Sample (5K07023-BS1)**

Prepared & Analyzed: 11/07/05

Lead 38.5 5.0 mg/kg 50.0 77 75-120

**Matrix Spike (5K07023-MS1)**

Source: MOK0106-01

Prepared & Analyzed: 11/07/05

Lead 39.5 5.0 mg/kg 50.0 2.2 75 75-120

**Matrix Spike Dup (5K07023-MSD1)**

Source: MOK0106-01

Prepared & Analyzed: 11/07/05

Lead 40.2 5.0 mg/kg 50.0 2.2 76 75-120 2 20

URS Corporation [Arco1]  
2870 Gateway Oaks Dr., Ste 300  
Sacramento CA, 95833Project: ARCO #6043, Modesto, CA  
Project Number: G0C1X-0002  
Project Manager: Vernon P. ElarthMOK0106  
Reported:  
11/08/05 08:27**Notes and Definitions**

LN MS and/or MSD below acceptance limits. See Blank Spike(LCS).

BA Relative percent difference out of control

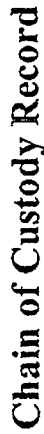
DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



## ARCO 2168 RAP Implementation

### Enfos Segment:

BP - Americas - West Coast - Beta - WCBII - CA

> Central > 2168 > HistoricalBL

**San Joaquin County Environmental Management Dept.**

11/7/05

Temp: 50-55

Temp: 60-64

Temp: 60-64

Sky Conditions: overcast

Meteorological Events: *Windy*

Wind Speed: 10-30. Direction:

BP COC Rev. 4 10/1/04

# SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

For Regulatory Purposes?  
 DRINKING WATER YES/NO  
 WASTE WATER YES/NO

DATE REC'D AT LAB: 11/3/05  
 TIME REC'D AT LAB: 8:30  
 DATE LOGGED IN: 11-3-05

CLIENT NAME: WRS  
 REC. BY (PRINT): MARCOS  
 WORKORDER: 406 6764

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERV ATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) <input checked="" type="radio"/> Present / Absent Intact / Broken*									
2. Chain-of-Custody <input checked="" type="radio"/> Present / Absent*									
3. Traffic Reports or Packing List: <input checked="" type="radio"/> Present / Absent									
4. Airbill: <input checked="" type="radio"/> Airbill / Sticker Present / Absent									
5. Airbill #: B1011557041									
6. Sample Labels: <input checked="" type="radio"/> Present / Absent									
7. Sample IDs: <input checked="" type="radio"/> Listed / Not Listed or Chain-of-Custody									
8. Sample Condition: <input checked="" type="radio"/> Intact / Broken* / Leaking*									
9. Does information on chain-of-custody, traffic reports and sample labels agree? <input checked="" type="radio"/> Yes / No*									
10. Sample received within hold time? <input checked="" type="radio"/> Yes / No*									
11. Adequate sample volume received? <input checked="" type="radio"/> Yes / No*									
12. Proper preservatives used? <input checked="" type="radio"/> Yes / No*									
13. Trip Blank / Temp Blank Received? (circle which, if Yes) <input checked="" type="radio"/> Yes / No*									
14. Read Temp: Corrected Temp: Is corrected temp 4 +/-2°C? (Acceptance range for samples requiring thermal pres.) <input checked="" type="radio"/> Yes / No**									

\*\*Exception (if any): METALS / DFF ON ICE  
 or Problem COC

\*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.



# Chain of Custody Record

Project Name: ARCO 6043  
BP BU/AR Region/Enfos Segment:

BP > Americas > West Coast > Retail > WCBU > CA  
> Northern > 6043 > Historical/BI

State or Lead Regulatory Agency: Sacramento County Dept. of Env. Mgmt

Requested Due Date (mm/dd/yy):

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions:	
Meteorological Events:	
Wind Speed:	Direction:

Page \_\_\_\_ of \_\_\_\_

Lab Name: Sequoia		BP/AR Facility No.: 6043		Consultant/Contractor: URS											
Address: 885 Jarvis Drive		BP/AR Facility Address: 2101 Tully Road, Modesto, CA		Address: 2870 Gateway Oaks Drive, Suite 150											
Morgan Hill, CA 95037		Site Lat/Long: N/A		Sacramento, CA 95833											
Lab PM: Lisa Race		California Global ID No.: T0609900177		Consultant/Contractor Project No.: 38466769.0063001											
Tele/Fax: 408.782.8156 / 408.782.6308		Enfos Project No.: G0C1X-0002		Consultant/Contractor PM: Vernon Elarth											
BP/AR PM Contact: Chuck Carmel		Provision or RCOP: Provisional		Tele/Fax: 916.679.2299 / 916.679.2900											
Address: P.O. Box 977		Phase/WBS: 06 - Closure		Report Type & QC Level: Level 1 with EDF											
Alamo, CA 94507-7977		Sub Phase/Task: 03 - Analytical		E-mail BDD To: Denise.Yee@urscorp.com											
Tele/Fax: 925.946.1085 / 925.946.1084		Cost Element: 05 - Subcontracted Costs		Invoice to: Atlantic Richfield Co.											
Lab Bottle Order No:		Matrix		Requested Analysis											
Item No.	Sample Description	Time	Date	Matrix	Laboratory No.	No. of Containers	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	GRO/TEXTA by 8260B	Total Lead by 2007 Cold	11/4/05	Sample Point Lat/Long and Comments
1	Drumcom 66043					1	X								hbk b/oc
2	TBARC6047-110205														fold
3															
4															
5															
6															
7															
8															
9															
10															
Sampler's Name:		Relinquished By / Affiliation		Date		Accepted By / Affiliation		Date		Time					
Sampler's Company:															
Shipment Date:															
Shipment Method:															
Shipment Tracking No:															
Special Instructions: Email results to Dillard (lisaz@dillardenvironmental.com)															
If total lead value is >50 ppm analyze for lead by STLC value is >5 ppm analyze for lead by TCLP															
Custody Seals In Place Yes No Temp Blank Yes No Cooler Temperature on Receipt °F/C Trip Blank Yes No															
Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor														BP COC Rev. 4 10/1/04	

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

Your EDF file has been successfully uploaded!

**Confirmation Number:** 8888758122

**Date/Time of Submittal:** 2/1/2006 1:57:54 PM

**Facility Global ID:** T0609900177

**Facility Name:** ARCO # 6043

**Submittal Title:** Well Destruction Report 2005

**Submittal Type:** WDR Reports

[Click here](#) to view the detections report for this upload.

**ARCO # 6043**  
2101 TULLY  
MODESTO, CA 95350

**Regional Board - Case #: 500203**  
CENTRAL VALLEY RWQCB (REGION 5S) - (MTS)  
**Local Agency (lead agency) - Case #: 164**  
STANISLAUS COUNTY LOP - (ND)

**NOTE: THIS DATA WAS SUBMITTED AFTER THE SITE WAS CLOSED**

<b>CONF #</b>	<b>TITLE</b>	<b>QUARTER</b>
8888758122	Well Destruction Report 2005	Q4 2005
<b>SUBMITTED BY</b>	<b>SUBMIT DATE</b>	<b>STATUS</b>
Denise Yee	2/1/2006	PENDING REVIEW

### **SAMPLE DETECTIONS REPORT**

# FIELD POINTS SAMPLED	1
# FIELD POINTS WITH DETECTIONS	0
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	0
SAMPLE MATRIX TYPES	SOIL

### **METHOD QA/QC REPORT**

METHODS USED SW6010B,SW8021F

TESTED FOR REQUIRED ANALYTES? **N**

MISSING PARAMETERS NOT TESTED:

- SW8021F REQUIRES MTBE TO BE TESTED
- SW8021F REQUIRES ETBE TO BE TESTED
- SW8021F REQUIRES TAME TO BE TESTED
- SW8021F REQUIRES DIPE TO BE TESTED
- SW8021F REQUIRES TBA TO BE TESTED
- SW8021F REQUIRES DCA12 TO BE TESTED
- SW8021F REQUIRES EDB TO BE TESTED

LAB NOTE DATA QUALIFIERS Y

### **QA/QC FOR 8021/8260 SERIES SAMPLES**

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	Y
- MATRIX SPIKE DUPLICATE	Y
- BLANK SPIKE	Y
- SURROGATE SPIKE	Y

### **WATER SAMPLES FOR 8021/8260 SERIES**

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	n/a

BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% n/a

**SOIL SAMPLES FOR 8021/8260 SERIES**

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% Y

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% Y

SURROGATE SPIKES % RECOVERY BETWEEN 70-125% Y

BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% n/a

**FIELD QC SAMPLES**

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS &gt; REPDL</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as URS-SAC (CONTRACTOR)

CONTACT SITE [ADMINISTRATOR](#).